

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**



**FILED**

10-31-07  
04:59 PM

Order Instituting Rulemaking to Implement the  
Commission; Procurement Incentive Framework and to  
Examine the Integration of Greenhouse Gas Emissions  
Standard into Procurement Policies.

Rulemaking 06-04-009  
(Filed April 13, 2006)

and

*CEC Docket 07-OIIP-01*

**COMMENTS OF  
WILD GOOSE STORAGE, LLC  
ON ALLOWANCE ALLOCATION ISSUES**

GOODIN, MACBRIDE, SQUERI,  
DAY & LAMPREY, LLP  
Jeanne B. Armstrong  
505 Sansome Street, Suite 900  
San Francisco, CA 94111  
Telephone: (415) 392-7900  
Facsimile: (415) 398-4321  
E-Mail: [jarmstrong@goddinmacbride.com](mailto:jarmstrong@goddinmacbride.com)

Date: October 31 , 2007

Attorneys for Wild Goose Storage, LLC

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Implement the  
Commission's Procurement Incentive Framework and to  
Examine the Integration of Greenhouse Gas Emissions  
Standard into Procurement Policies.

Rulemaking 06-04-009  
(Filed April 13, 2006)

and

*CEC Docket 07-OIIP-01*

**COMMENTS OF  
WILD GOOSE STORAGE, LLC  
ON ALLOWANCE ALLOCATION ISSUES**

In accord with the October 15, 2007 Administrative Law Judge's Ruling in the above captioned proceeding ("October 15 Ruling"), Wild Goose Storage, LLC ("Wild Goose"), hereby submits these comments on issues related to the distribution of greenhouse gas ("GHG") emission allowances.

**I. POLICY CONSIDERATIONS**

The October 15 Ruling opines that, "developing evaluation criteria may help the [California Public Utilities and the California Energy] Commissions analyze the issues surrounding emission allowance allocation issues." To this end, the Ruling sets forth eight principals which are recommended by the Market Advisory Committee guidelines for allocating allowances, and questions parties as to the efficacy of these criteria and whether additional criteria should be added. Wild Goose does not take issue with any of the criteria listed, but submits that three additional criteria should be added.

The first is that the CPUC should ensure that California ratepayers are not unduly harmed by whatever allocation process is put in place. In this regard, the CPUC should recognize that the costs incurred by the investor-owned utilities for the procurement of GHG

emission allowances in an auction will be passed through directly to ratepayers. Unless it is the intent of the State of California to take the revenue obtained from the auction of allowances to the IOUs and funnel it directly back to ratepayers,<sup>1</sup> they, not the utilities will bear the costs of a GHG auction process.

Second, the Commission should ensure that the allocation method chosen does not create an uneven playing field among the competitive energy service providers in the state. Wild Goose is an independent storage provider which offers natural gas storage services at market-based rates. Wild Goose has no captive customers. Any costs of obtaining GHG emission allowances through an auction process will, of necessity, be passed through in the rates it charges its customers, which are free to obtain service from a number of providers. In contrast, Pacific Gas and Electric Company provides, among other services, natural gas storage services both on a competitive base and to core, captive customers. PG&E's costs of obtaining GHG emission allowances for its natural gas storage operations through an auction process can be recovered directly from the rates it charges its core customers; PG&E does not have to increase the rates of its competitive storage services to recover its GHG allowance costs. PG&E could thereby gain a competitive advantage over Wild Goose as a direct result of the manner in which GHG emission allowances are allocated.

Finally the Commission should ensure that the allocation method chosen does not result in a disincentive for entities to build energy infrastructure which is vital to the economic future of California. An entity seeking to enter the California energy market, or one already in the market seeking to expand its facilities, should not be faced with the process of obtaining

---

<sup>1</sup> See Question No. 8 in the October 15 Ruling which implies that such is a possibility. There would however still remain the issue of the time value of money.

costly emission allowances through an auction process. The cost of such allowances, once factored into the economics of the planned project, might render it no longer cost effective. California might thus be deprived of much needed energy infrastructure. Moreover, as the Climate Action Team Final Report indicates, gas used as a replacement fuel results in significant GHG reductions. In order for natural gas to provide such a benefit to California, the State must maintain, and promote growth in natural gas infrastructure, such as storage facilities.

All of the above criteria, which speak toward the fairness of an emission allowance distribution methodology would lean away from the adoption of an auction process and have the CPUC recommend the adoption of an administrative allocation of all or most of the emission allowances. Wild Goose would strongly support such a recommendation. To this end, Wild Goose believes that an administrative allocation of allowances would be consistent with the Market Advisory Committee's overall goal of distributing allowances "in a manner consistent with fundamental objectives of cost-effectiveness fairness and simplicity," as well the CPUC's objectives of protecting ratepayers and enhancing competition in the California energy market.

## **II. METHOD FOR ADMINISTRATIVE ALLOCATION OF EMISSION ALLOWANCES**

The October 15 Ruling provides three potential methods for the allocation of emission allowances; (a) grandfathering; (b) benchmarking; and (c) updating, and seeks comments thereon. As explained below, Wild Goose submits that either "benchmarking" or "updating," if designed properly, could provide an effective and fair means of allocating allowances, while grandfathering could raise a series of contentious issues, and lead to an unfair allocation.

In making a decision on which allocation method to recommend, the CPUC should recognize that embedded within the definition of each method is an inherent time element

– e.g., the time period over which any given allocation would last. Thus, for example, grandfathering is defined as “a method by which emission allowances are freely distributed to entities covered under an emission trading program based on historic emissions.” As there is no demarcation of how long such allocation would last, an allocation in perpetuity is inherent in the definition. Such an allocation can lead to all forms of market manipulation. In contrast, both benchmarking and updating have an element of change built into their respective definitions. This element allows the CPUC to recommend an allocation period. As detailed below, Wild Goose would suggest that an annual allocation would result in the most equitable distribution of emission allowances.

As alluded to above, both benchmarking and updating allow for a change in an entity’s operations over time. Benchmarking, which bases allocation on a level of permitted emissions per unit of input or output, would result in an entity which increases in size between allocation periods (and thereby increasing its input and/or output) to receive a larger allocation of credits as its operations change.<sup>2</sup> The same is true for the updating methodology which inherently recognizes changed circumstances and would allocate emission allowances using a factor which recognizes such change.

In order for either the benchmarking or updating allocation methodologies to be effective (i.e., capturing changes in circumstances), the allocation should be done on an annual basis and should be done using an allocation factor which is pervasive among all entities which will be afforded an allocation – e.g., fuel use. Moreover, in order to ensure that no allowances are left unused (or that there is no improper manipulation of the process), the allocation should

---

<sup>2</sup> Wild Goose is assuming that the initial level of permitted emission per unit of input or output would be based on the entity’s prior year input or output levels.

be based on the prior year's (not upcoming year) fuel use. While Wild Goose recognizes that such an allocation will require new market entrants or those expanding their facilities in an upcoming year to go to the market to obtain the GHG allowances needed for the period of time prior to the next allocation cycle, such should not provide a significant deterrent to entry/expansion in the energy market given the recommended frequency of the allocation cycle.

In contrast to the equity inherent in both the benchmarking and updating methodologies, Wild Goose believes that an allocation process using a grandfathering methodology – basing the allowance on historic emissions – will insert significant controversy and a degree of inequity into the process. Such is evident by certain of the questions posed in the October 15 Ruling. For example, question 14 queries that “If emission allowances are allocated based on historical emissions (“grandfathering”) what base years should be used as the basis for this allocation.” Under such a process there are clearly winners and losers based on which base year is chosen. For example, if 2000 was chosen as a base year, the facility that expanded in 1999, and thus would get its needed allocation, would be a winner while the facility that expanded in 2001, and therefore would not get its full allocation would lose, having to go to the market to obtain the rest. Similarly, question 12 of the Ruling asks, “If new market entrants receive emission allowance allocations, how would the proper level of allocation be determined for them.” Under a grandfathering process, where allocations are based on historic emissions, it would be difficult to determine an equitable level of allocation. For example, if the new market entrant was afforded an allocation based on its current emissions it may achieve a distinct advantage over competitors which received an allocation based on historic (and perhaps lower) emissions.

The way to avoid these inequities is to place everyone on the same level – all participants in the allocation process will receive an allocation of emissions allowances based on prior year fuel input, with such allocation process to be repeated on an annual basis. Moreover, the use of a one year allocation based on prior year’s fuel use would limit the potential for windfall profits, since excess allowances would only be good for one year, and at that time, the allowances would be recalculated. For example, if a facility which is allocated emissions allowances shuts down and therefore no longer needs its allowances for its operations, it will only have the opportunity to sell them into the open market for a year. After that the allowance would be recalculated based on prior year fuel use which would reflect the closing of the facility. Similarly, prior to the first allocation cycle, a facility which increased its operations beyond an economic point for the purpose of receiving a greater allocation of emission allowances, would only enjoy the ability to sell those “extra” credits into the market for a year. At the time of the annual allocation, its allowances would be reduced to reflect the lower level of operations (made necessary by the fact the extra credits were sold into the market).

### **III. CONCLUSION**

Wild Goose appreciates this opportunity to offer these comments on issues related to the distribution of greenhouse gas emission allowances. Wild Goose would simply request that the CPUC, in formulating its proposed recommendation to the Air Resources Board on which methodology to employ for such allocations, factor into its deliberations certain of the CPUC’s fundamental policy objectives, as discussed above.

Respectfully submitted,

GOODIN, MACBRIDE, SQUERI,  
DAY & LAMPREY, LLP  
Jeanne B. Armstrong  
505 Sansome Street, Suite 900  
San Francisco, CA 94111  
Telephone: (415) 392-7900  
Facsimile: (415) 398-4321  
E-mail: [jarmstrong@goodinmacbride.com](mailto:jarmstrong@goodinmacbride.com)

By /s/ Jeanne B. Armstrong  
Jeanne B. Armstrong

Attorneys for Wild Goose Storage, LLC

October 31, 2007

3278/005/X93866.v1



**CERTIFICATE OF SERVICE**

I, Lisa Vieland, certify that I have on this 31st day of October 2007 caused a copy of the foregoing

**COMMENTS OF WILD GOOSE STORAGE, LLC ON ALLOWANCE  
ALLOCATION ISSUES**

to be served on all known parties to R.06-04-009 listed on the most recently updated service list available on the California Public Utilities Commission website, via email to those listed with email and via U.S. mail to those without email service. I also caused courtesy copies to be hand-delivered as follows:

Commissioner President Michael R. Peevey  
California Public Utilities Commission  
State Building, Room 5218  
505 Van Ness Avenue  
San Francisco, CA 94102

ALJ Charlotte TerKeurst  
California Public Utilities Commission  
State Building, Room 5117  
505 Van Ness Avenue  
San Francisco, CA 94102

ALJ Jonathan Lakritz  
California Public Utilities Commission  
State Building, Room 5020  
505 Van Ness Avenue  
San Francisco, CA 94102

ALJ Meg Gottstein  
California Public Utilities Commission  
State Building, Room 2106  
505 Van Ness Avenue  
San Francisco, CA 94102

I declare under penalty of perjury that the foregoing is true and correct. Executed this 31st day of October 2007 at San Francisco, California.

/s/ Lisa Vieland  
Lisa Vieland

Service List R.06-04-009  
Last Updated 10/29/07

CINDY ADAMS  
cadams@covantaenergy.com

STEVEN S. SCHLEIMER  
steven.schleimer@barclayscapital.com

STEVEN HUHMAN  
steven.huhman@morganstanley.com

RICK C. NOGER  
rick\_noger@praxair.com

KEITH R. MCCREA  
keith.mccrea@sablaw.com

ADAM J. KATZ  
ajkatz@mwe.com

CATHERINE M. KRUPKA  
ckrupka@mwe.com

LISA M. DECKER  
lisa.decker@constellation.com

CATHY S. WOOLLUMS  
cswoollums@midamerican.com

KEVIN BOUDREAUX  
kevin.boudreaux@calpine.com

THOMAS DILL  
trdill@westernhubs.com

E.J. WRIGHT  
ej\_wright@oxy.com

PAUL M. SEBY  
pseby@mckennalong.com

TIMOTHY R. ODIL  
todil@mckennalong.com

STEPHEN G. KOERNER, ESQ.  
steve.koerner@elpaso.com

JENINE SCHENK  
jenine.schenk@apses.com

JOHN B. WELDON, JR.  
jbw@slwplc.com

KELLY BARR  
kelly.barr@srpnet.com

ROBERT R. TAYLOR  
rrtaylor@srpnet.com

STEVEN S. MICHEL  
smichel@westernresources.org

ROGER C. MONTGOMERY  
roger.montgomery@swgas.com

RONALD F. DEATON  
ron.deaton@ladwp.com

SID NEWSOM  
snewsom@semprautilities.com

DAVID L. HUARD  
dhuard@manatt.com

CURTIS L. KEBLER  
curtis.kebler@gs.com

DENNIS M.P. EHLING  
dehling@klng.com

GREGORY KOISER  
gregory.koiser@constellation.com

NORMAN A. PEDERSEN  
npedersen@hanmor.com

MICHAEL MAZUR  
mmazur@3phasesRenewables.com

TIFFANY RAU  
tiffany.rau@bp.com

GREGORY KLATT  
klatt@energyattorney.com

RICHARD HELGESON  
rhelgeson@scppa.org

DANIEL W. DOUGLASS  
douglass@energyattorney.com

PAUL DELANEY  
pssed@adelphia.net

AKBAR JAZAYEIRI  
akbar.jazayeri@sce.com

ANNETTE GILLIAM  
annette.gilliam@sce.com

CATHY A. KARLSTAD  
cathy.karlstad@sce.com

LAURA I. GENAO  
Laura.Genao@sce.com

RONALD MOORE  
rkmoore@gswater.com

DON WOOD  
dwood8@cox.net

AIMEE M. SMITH  
amsmith@sempra.com

ALLEN K. TRIAL  
atrial@sempra.com

ALVIN PAK  
apak@sempraglobal.com

DAN HECHT  
dhecht@sempratrading.com

DANIEL A. KING  
daking@sempra.com

SYMONE VONGDEUANE  
svongdeuane@semprasolutions.com

THEODORE ROBERTS  
troberts@sempra.com

DONALD C. LIDDELL, P.C.  
liddell@energyattorney.com

MARCIE MILNER  
marcie.milner@shell.com

REID A. WINTHROP  
rwinthrop@pilotpowergroup.com

THOMAS DARTON  
tdarton@pilotpowergroup.com

STEVE RAHON  
lschavrien@semprautilities.com

GLORIA BRITTON  
GloriaB@anzaelectric.org

LYNELLE LUND  
llund@commerceenergy.com

TAMLYN M. HUNT  
thunt@cecmail.org

JEANNE M. SOLE  
jeanne.sole@sfgov.org

JOHN P. HUGHES  
john.hughes@sce.com

LAD LORENZ  
llorenz@semprautilities.com

MARCEL HAWIGER  
marcel@turn.org

NINA SUETAKE  
nsuetake@turn.org

Diana L. Lee  
dil@cpuc.ca.gov

F. Jackson Stoddard  
fjs@cpuc.ca.gov

AUDREY CHANG  
achang@nrdc.org

DONALD BROOKHYSER  
rsa@a-klaw.com

EVELYN KAHL  
ek@a-klaw.com

KRISTIN GRENFELL  
kgrenfell@nrdc.org

MICHAEL P. ALCANTAR  
mpa@a-klaw.com

SEEMA SRINIVASAN  
sls@a-klaw.com

WILLIAM H. CHEN  
bill.chen@constellation.com

BRIAN K. CHERRY  
bkc7@pge.com

EDWARD G POOLE  
epoole@adplaw.com

ANN G. GRIMALDI  
agrimaldi@mckennalong.com

BRIAN T. CRAGG  
bcragg@goodinmacbride.com

JAMES D. SQUERI  
jsqueri@gmssr.com

JEANNE B. ARMSTRONG  
jarmstrong@goodinmacbride.com

KAREN BOWEN  
kbowen@winston.com

LISA A. COTTLE  
lcottle@winston.com

SEAN P. BEATTY  
sbeatty@cwclaw.com

VIDHYA PRABHAKARAN  
vprabhakaran@goodinmacbride.com

JOSEPH M. KARP  
jkarp@winston.com

JEFFREY P. GRAY  
jeffgray@dwt.com

CHRISTOPHER J. WARNER  
cjw5@pge.com

SARA STECK MYERS  
ssmyers@att.net

LARS KVALE  
lars@resource-solutions.org

ANDREW L. HARRIS  
alho@pge.com

ANDREA WELLER  
aweller@sel.com

JENNIFER CHAMBERLIN  
jchamberlin@strategicenergy.com

BETH VAUGHAN  
beth@beth411.com

KERRY HATTEVIK  
kerry.hattevik@mirant.com

AVIS KOWALEWSKI  
kowalewska@calpine.com

WILLIAM H. BOOTH  
wbooth@booth-law.com

J. ANDREW HOERNER  
hoerner@redefiningprogress.org

JANILL RICHARDS  
janill.richards@doj.ca.gov

CLIFF CHEN  
cchen@ucsusa.org

GREGG MORRIS  
gmorris@emf.net

R. THOMAS BEACH  
tomb@crossborderenergy.com

BARRY F. MCCARTHY  
bmcc@mccarthyaw.com

C. SUSIE BERLIN  
sberlin@mccarthyaw.com

MIKE LAMOND  
anginc@goldrush.com

JOY A. WARREN  
joyw@mid.org

BALDASSARO DI CAPO  
California Independent System Operator  
151 BLUE RAVINE ROAD  
FOLSOM, CA 95630

JOHN JENSEN  
jjensen@kirkwood.com

MARY LYNCH  
mary.lynych@constellation.com

LEONARD DEVANNA  
lrdevanna-rf@cleanenergysystems.com

ANDREW BROWN  
abb@eslawfirm.com

BRUCE MCLAUGHLIN  
mclaughlin@braunlegal.com

GREGGORY L. WHEATLAND  
glw@eslawfirm.com

JANE E. LUCKHARDT  
jluckhardt@downeybrand.com

JEFFERY D. HARRIS  
jdh@eslawfirm.com

VIRGIL WELCH  
vwelch@environmentaldefense.org

WILLIAM W. WESTERFIELD, 111  
www@eslawfirm.com

DOWNEY BRAND  
DOWNEY BRAND  
Sacramento Municipal  
555 CAPITOL MALL, 10TH FLOOR  
SACRAMENTO, CA 95814-4686

RAYMOND J. CZAHR, C.P.A.  
westgas@aol.com

STEVEN M. COHN  
scohn@smud.org

ANN L. TROWBRIDGE  
atrowbridge@daycartermurphy.com

DAN SILVERIA  
dansvec@hdo.net

JESSICA NELSON  
notice@psrec.coop

DONALD BROOKHYSER  
deb@a-klaw.com

CYNTHIA SCHULTZ  
cynthia.schultz@pacificorp.com

KYLE L. DAVIS  
kyle.l.davis@pacificorp.com

RYAN FLYNN  
ryan.flynn@pacificorp.com

IAN CARTER  
carter@ieta.org

JASON DUBCHAK  
jason.dubchak@niskags.com

BRIAN M. JONES  
bjones@mjbradley.com

MATTHEW MOST  
EDISON MISSION MARKETING &  
TRADING, INC.  
160 FEDERAL STREET  
BOSTON, MA 02110-1776

KENNETH A. COLBURN  
kcolburn@symbioticstrategies.com

RICHARD COWART  
rapcowart@aol.com

KATHRYN WIG  
Kathryn.Wig@nrgenergy.com

SAKIS ASTERIADIS  
sasteriadis@apx.com

GEORGE HOPLEY  
george.hopley@barcap.com

ELIZABETH ZELLJADT  
ez@pointcarbon.com

DALLAS BURTRAW  
burtraw@rff.org

VERONIQUE BUGNION  
vb@pointcarbon.com

KYLE D. BOUDREAU  
kyle\_boudreaux@fpl.com

ANDREW BRADFORD  
andrew.bradford@constellation.com

GARY BARCH  
gbarch@knowledgeinenergy.com

RALPH E. DENNIS  
ralph.dennis@constellation.com

SAMARA MINDEL  
smindel@knowledgeinenergy.com

BARRY RABE  
brabe@umich.edu

BRIAN POTTS  
bpotts@foley.com

JAMES W. KEATING  
james.keating@bp.com

JAMES ROSS  
jimross@r-c-s-inc.com

TRENT A. CARLSON  
tcarlson@reliant.com

GARY HINNERS  
ghinners@reliant.com

JEANNE ZAIONTZ  
zaiontj@bp.com

JULIE L. MARTIN  
julie.martin@bp.com

FIJI GEORGE  
fiji.george@elpaso.com

ED CHIANG  
echiang@elementmarkets.com

NADAV ENBAR  
nenbar@energy-insights.com

NICHOLAS LENSSEN  
nlenssen@energy-insights.com

ELIZABETH BAKER  
bbaker@summitblue.com

WAYNE TOMLINSON  
william.tomlinson@elpaso.com

KEVIN J. SIMONSEN  
kjsimonsen@ems-ca.com

SANDRA ELY  
Sandra.ely@state.nm.us

BRIAN MCQUOWN  
bmcquown@reliant.com

DOUGLAS BROOKS  
dbrooks@nevap.com

ANITA HART  
anita.hart@swgas.com

RANDY SABLE  
randy.sable@swgas.com

BILL SCHRAND  
bill.schrand@swgas.com

JJ PRUCNAL  
jj.prucnal@swgas.com

SANDRA CAROLINA  
sandra.carolina@swgas.com

CYNTHIA MITCHELL  
ckmitchell1@sbcglobal.net

CHRISTOPHER A. HILEN  
chilen@sppc.com

ELENA MELLO  
emello@sppc.com

TREVOR DILLARD  
tdillard@sierrapacific.com

DARRELL SOYARS  
dsoyars@sppc.com

FRANK LUCHETTI  
fluchetti@ndep.nv.gov

LEILANI JOHNSON KOWAL  
leilani.johnson@ladwp.com

LORRAINE PASKETT  
Lorraine.Paskett@ladwp.com

RANDY S. HOWARD  
randy.howard@ladwp.com

ROBERT L. PETTINATO  
robert.pettinato@ladwp.com

HUGH YAO  
HYao@SempraUtilities.com

RASHA PRINCE  
rprince@semprautilities.com

RANDALL W. KEEN  
rkeen@manatt.com

S. NANCY WHANG  
nwhang@manatt.com

PETER JAZAYERI  
pjazayeri@stroock.com

DEREK MARKOLF  
derek@climateregistry.org

DAVID NEMTZOW  
david@nemtzw.com

HARVEY EDER  
harveyederpspc.org@hotmail.com

VITALY LEE  
vitaly.lee@aes.com

STEVE ENDO  
sendo@ci.pasadena.ca.us

STEVEN G. LINS  
slins@ci.glendale.ca.us

TOM HAMILTON  
THAMILTON5@CHARTER.NET

BRUNO JEIDER  
bjeider@ci.burbank.ca.us

RICHARD J. MORILLO  
rmorillo@ci.burbank.ca.us

ROGER PELOTE  
roger.pelote@williams.com

AIMEE BARNES  
aimee.barnes@ecosecurities.com

CASE ADMINISTRATION  
case.admin@sce.com

TIM HEMIG  
tim.hemig@nrgenergy.com

BARRY LOVELL  
bjl@bry.com

ALDYN HOEKSTRA  
aldyn.hoekstra@paceglobal.com

YVONNE GROSS  
ygross@sempraglobal.com

JOHN LAUN  
jlaun@apogee.net

KIM KIENER  
kмкиener@fox.net

SCOTT J. ANDERS  
scottanders@sandiego.edu

JOSEPH R. KLOBERDANZ  
jkloberdanz@semprautilities.com

ANDREW MCALLISTER  
andrew.mcallister@energycenter.org

JACK BURKE  
jack.burke@energycenter.org

JENNIFER PORTER  
jennifer.porter@energycenter.org

SEPHRA A. NINOW  
sephra.ninow@energycenter.org

JOHN W. LESLIE  
jleslie@luce.com

ORLANDO B. FOOTE, III  
ofoote@hkcf-law.com

ELSTON K. GRUBAUGH  
ekgrubaugh@iid.com

THOMAS MCCABE  
EDISON MISSION ENERGY  
18101 VON KARMAN AVE., STE 1700  
IRVINE, CA 92612

JAN PEPPER  
pepper@cleanpowermarkets.com

GLORIA D. SMITH  
gsmith@adamsbroadwell.com

MARC D. JOSEPH  
mdjoseph@adamsbroadwell.com

DIANE I. FELLMAN  
diane\_fellman@fpl.com

HAYLEY GOODSON  
hayley@turn.org

MICHEL FLORIO  
mflorio@turn.org

DAN ADLER  
Dan.adler@calcef.org

MICHAEL A. HYAMS  
mhyams@sflower.org

THERESA BURKE  
tburke@sflower.org

NORMAN J. FURUTA  
norman.furuta@navy.mil

AMBER MAHONE  
amber@ethree.com

ANNABELLE MALINS  
annabelle.malins@fco.gov.uk

DEVRA WANG  
dwang@nrdc.org

KAREN TERRANOVA  
filings@a-klaw.com

NORA SHERIFF  
nes@a-klaw.com

OLOF BYSTROM  
obystrom@cera.com

SETH HILTON  
sdhilton@stoel.com

SHERYL CARTER  
scarter@nrdc.org

ASHLEE M. BONDS  
abonds@thelen.com

CARMEN E. BASKETTE  
cbaskette@enernoc.com

COLIN PETHERAM  
colin.petheram@att.com

JAMES W. TARNAGHAN  
jwmctarnaghan@duanemorris.com

KEVIN FOX  
kfox@wsgr.com

KHURSHID KHOJA  
kkhoja@thelenreid.com

PETER V. ALLEN  
pvallen@thelen.com

SHERIDAN J. PAUKER  
spauker@wsgr.com

ROBERT J. REINHARD  
reinhard@mofo.com

CALIFORNIA ENERGY MARKETS  
cem@newsdata.com

HOWARD V. GOLUB  
hgolub@nixonpeabody.com

JANINE L. SCANCARELLI  
jscancarelli@flk.com

JOSEPH F. WIEDMAN  
jwiedman@goodinmacbride.com

MARTIN A. MATTES  
mmattes@nossaman.com

JEN MCGRAW  
jen@cnt.org

LISA WEINZIMER  
lisa\_weinzimer@platts.com

STEVEN MOSS  
steven@moss.net

SHAUN ELLIS  
sellis@fypower.org

ARNO HARRIS  
arno@recurrentenergy.com

ED LUCHA  
ELL5@pge.com

GRACE LIVINGSTON-NUNLEY  
gxl2@pge.com

JASMIN ANSAR  
jxa2@pge.com

JONATHAN FORRESTER  
JDF1@PGE.COM

RAYMOND HUNG  
RHHJ@pge.com

SEBASTIEN CSAPO  
sscb@pge.com

SOUMYA SASTRY  
svs6@pge.com

STEPHANIE LA SHAWN  
S1L7@pge.com

VALERIE J. WINN  
vjw3@pge.com

KARLA DAILEY  
karla.dailey@cityofpaloalto.org

FARROKH ALBUYEH  
farrokh.albuyeh@oati.net

DEAN R. TIBBS  
dtibbs@aes4u.com

JEFFREY L. HAHN  
jhahn@covantaenergy.com

ANDREW J. VAN HORN  
andy.vanhorn@vhcenergy.com

JOSEPH M. PAUL  
Joe.paul@dynegy.com

SUE KATELEY  
info@calseia.org

GREG BLUE  
gblue@enxco.com

SARAH BESERRA  
sbeserra@sbcglobal.net

MONICA A. SCHWEBS, ESQ.  
monica.schwebs@bingham.com

PETER W. HANSCHEN  
phansch@mofo.com

JOSEPH HENRI  
josephhenri@hotmail.com

PATRICIA THOMPSON  
pthompson@summitblue.com

WILLIAM F. DIETRICH  
dietrichlaw2@earthlink.net

BETTY SETO  
Betty.Seto@kema.com

GERALD L. LAHR  
JerryL@abag.ca.gov

JODY S. LONDON  
jody\_london\_consulting@earthlink.net

STEVEN SCHILLER  
steve@schiller.com

MRW & ASSOCIATES, INC.  
mrw@mrwassoc.com

REED V. SCHMIDT  
rschmidt@bartlewells.com

ADAM BRIONES  
adamb@greenlining.org

CLYDE MURLEY  
clyde.murley@comcast.net

BRENDA LEMAY  
brenda.lemay@horizonwind.com

CARLA PETERMAN  
carla.peterman@gmail.com

EDWARD VINE  
elvine@ibl.gov

RYAN WISER  
rhwiser@ibl.gov

CHRIS MARNAY  
C\_Marnay@1b1.gov

PHILLIP J. MULLER  
philm@scdenergy.com

RITA NORTON  
rita@ritanortonconsulting.com

CARL PECHMAN  
cpechman@powereconomics.com

MAHLON ALDRIDGE  
emahlon@ecoact.org

RICHARD SMITH  
richards@mid.org

MODESTO IRRIGATION DISTRICT  
1231 11TH STREET  
MODESTO, CA 95354

ROGER VAN HOY  
rogerv@mid.org

WES MONIER  
fwmonier@tid.org

BARBARA R. BARKOVICH  
brbarkovich@earthlink.net

JOHN R. REDDING  
johnredding@earthlink.net

CLARK BERNIER  
clark.bernier@rlw.com

RICHARD MCCANN, PH.D  
rmccann@umich.edu

CAROLYN M. KEHREIN  
cmkehrein@ems-ca.com

CALIFORNIA ISO  
e-recipient@caiso.com

GRANT ROSENBLUM, ESQ.  
grosenblum@caiso.com

KAREN EDSON  
151 BLUE RAVINE ROAD  
FOLSOM, CA 95630

ROBIN SMUTNY-JONES  
rsmutny-jones@caiso.com

SAEED FARROKHPAY  
saeed.farrokhpay@ferc.gov

DAVID BRANCHCOMB  
david@branchcomb.com

KENNY SWAIN  
kenneth.swain@navigantconsulting.com

KIRBY DUSEL  
kdusel@navigantconsulting.com

GORDON PICKERING  
gpickering@navigantconsulting.com

LAURIE PARK  
lpark@navigantconsulting.com

DAVID REYNOLDS  
davidreynolds@ncpa.com

SCOTT TOMASHEFSKY  
scott.tomashefsky@ncpa.com

ELLEN WOLFE  
ewolfe@resero.com

AUDRA HARTMANN  
Audra.Hartmann@Dynergy.com

BOB LUCAS  
Bob.lucas@calobby.com

CURT BARRY  
curt.barry@iwpnews.com

DAN SKOPEC  
danskopec@gmail.com

DANIELLE MATTHEWS SEPERAS  
dseperas@calpine.com

DAVID L. MODISETTE  
dave@ppallc.com

DOUGLAS K. KERNER  
dkk@eslawfirm.com

JUSTIN C. WYNNE  
wynne@braunlegal.com

KASSANDRA GOUGH  
kgough@calpine.com

KELLIE SMITH  
kellie.smith@sen.ca.gov

KEVIN WOODRUFF  
kdw@woodruff-expert-services.com

MICHAEL WAUGH  
mwaugh@arb.ca.gov

PANAMA BARTHOLOMY  
pbarthol@energy.state.ca.us

PATRICK STONER  
pstoner@lgc.org

RACHEL MCMAHON  
rachel@ceert.org

WEBSTER TASAT  
wtasat@arb.ca.gov

STEVEN KELLY  
steven@iepa.com

EDWARD J. TIEDEMANN  
etiedemann@kmtg.com

LAURIE TEN HOPE  
ltenhope@energy.state.ca.us

JOSHUA BUSHINSKY  
bushinskyj@pewclimate.org

LYNN HAUG  
lmh@eslawfirm.com

OBADIAH BARTHOLOMY  
obartho@smud.org

BUD BEEBE  
bbeebe@smud.org

BALWANT S. PUREWAL  
bpurewal@water.ca.gov

DOUGLAS MACMULLEN  
dmacml@water.ca.gov

KAREN NORENE MILLS  
kmills@cfbf.com

KAREN LINDH  
karen@klindh.com

ELIZABETH W. HADLEY  
ehadley@reupower.com

DENISE HILL  
Denise\_Hill@transalta.com

ANNIE STANGE  
sas@a-klaw.com

ELIZABETH WESTBY  
egw@a-klaw.com

ALEXIA C. KELLY  
akelly@climatetrust.org

ALAN COMNES  
alan.comnes@nrgenergy.com

KYLE SILON  
kyle.silon@ecosecurities.com

CATHIE ALLEN  
californiadockets@pacificcorp.com

PHIL CARVER  
Philip.H.Carver@state.or.us

SAM SADLER  
samuel.r.sadler@state.or.us

LISA SCHWARTZ  
lisa.c.schwartz@state.or.us

CLARE BREIDENICH  
cbreidenich@yahoo.com

DONALD SCHOENBECK  
dws@r-c-s-inc.com

JESUS ARREDONDO  
jesus.arredondo@nrenergy.com

CHARLIE BLAIR  
charlie.blair@delta-ee.com

KAREN MCDONALD  
karen.mcdonald@powerex.com

CLARENCE BINNINGER  
clarence.binninger@doj.ca.gov

DAVID ZONANA  
david.zonana@doj.ca.gov

Andrew Campbell  
agc@cpuc.ca.gov

Anne Gillette  
aeg@cpuc.ca.gov

Beth Moore  
blm@cpuc.ca.gov

Cathleen A. Fogel  
cf1@cpuc.ca.gov

Charlotte TerKeurst  
cft@cpuc.ca.gov

Christine S. Tam  
tam@cpuc.ca.gov

Donald R. Smith  
dsh@cpuc.ca.gov

Ed Moldavsky  
edm@cpuc.ca.gov

Eugene Cadenasso  
cpe@cpuc.ca.gov

Harvey Y. Morris  
hym@cpuc.ca.gov

Henry Stern  
hs1@cpuc.ca.gov

Jaclyn Marks  
jm3@cpuc.ca.gov

Jacqueline Greig  
jnm@cpuc.ca.gov

Jamie Fordyce  
jbf@cpuc.ca.gov

Jason R. Salmi Klotz  
jk1@cpuc.ca.gov

George S. Tagnipes  
jst@cpuc.ca.gov

Joel T. Perlstein  
jtp@cpuc.ca.gov

Jonathan Lakritz  
jol@cpuc.ca.gov

Judith Ikle  
jci@cpuc.ca.gov

Julie A. Fitch  
jf2@cpuc.ca.gov

Kristin Ralff Douglas  
krd@cpuc.ca.gov

Lainie Motamedi  
lrm@cpuc.ca.gov

Lana Tran  
ltn@cpuc.ca.gov

Matthew Deal  
mjd@cpuc.ca.gov

Nancy Ryan  
ner@cpuc.ca.gov

Pamela Wellner  
pw1@cpuc.ca.gov

Paul S. Phillips  
psp@cpuc.ca.gov

Pearlie Sabino  
pzs@cpuc.ca.gov

Rahmon Momoh  
rmm@cpuc.ca.gov

Richard A. Myers  
ram@cpuc.ca.gov

Sara M. Kamins  
smk@cpuc.ca.gov

Scott Murtishaw  
sgm@cpuc.ca.gov

Sean A. Simon  
svn@cpuc.ca.gov

Steve Roscow  
scr@cpuc.ca.gov

Theresa Cho  
tcx@cpuc.ca.gov

BILL LOCKYER  
ken.alex@doj.ca.gov

KEN ALEX  
ken.alex@doj.ca.gov

BALDASSARO DICAPO  
bdicapo@caiso.com

JUDITH B. SANDERS  
jsanders@caiso.com

JULIE GILL  
jgill@caiso.com

MARY MCDONALD  
DIRECTOR OF STATE AFFAIRS  
CALIFORNIA INDEPENDENT SYSTEM  
OPERATOR  
CAISO  
151 BLUE RAVINE ROAD  
FOLSOM, CA 95630

PHILIP D. PETTINGILL  
ppettingill@caiso.com

MICHAEL SCHEIBLE  
mscheibl@arb.ca.gov

EVAN POWERS  
epowers@arb.ca.gov

JEFFREY DOLL  
jdoll@arb.ca.gov

PAM BURMICH  
pburmich@arb.ca.gov

B. B. BLEVINS  
bblevins@energy.state.ca.us

DARYL METZ  
dmetz@energy.state.ca.us

DEBORAH SLON  
deborah.slon@doj.ca.gov

Don Schultz  
dks@cpuc.ca.gov

KAREN GRIFFIN  
kgriffin@energy.state.ca.us

LISA DECARLO  
ldecarlo@energy.state.ca.us

MARC PRYOR  
mpryor@energy.state.ca.us

MICHELLE GARCIA  
mgarcia@arb.ca.gov

PIERRE H. DUVAIR  
pduvair@energy.state.ca.us

Wade McCartney  
wsm@cpuc.ca.gov

CAROL J. HURLOCK  
hurlock@water.ca.gov

HOLLY B. CRONIN  
hcronin@water.ca.gov

PUC/X93876.v1